

IN THE SPECIFICATION

*In the Abstract, please amend the following.*

A method and a device for on-chip magnetic resonance spectroscopy (~~FMR, SPR, EPR,~~ ESR, NMR) is proposed. On-chip magnetic resonance spectroscopy may be applied to non-magnetic as well as magnetic materials which may be solids, liquids, or gases. ~~and to solids, liquids and gases.~~ The method of the present invention is suitable for ~~miniaturised~~ miniaturized materials analysis ~~such as for example microfluidics~~ such as, for example, micro-fluidics. ~~The strength of~~ In an example embodiment, the method ~~lies in the~~ relies on the combination of highly efficient spin excitation near on-chip current wires with very sensitive on-chip magnetic sensors. The method and device also allows one to separately detect different types of magnetic particles or molecules.

~~Fig. 3~~